

GOLDEN BRODIAEA

Triteleia ixioides (Ait.f.) Greene

plant symbol = TRIX

Contributed By: USDA, NRCS, National Plant Data Center

Alternate Names



Gladys L. Smith
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Yellow-blossom grassnut, pretty face

Uses

Ethnobotanic: The corms of this plant were dug with a digging stick and eaten by the Yokuts and Sierra Miwok in California.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status, and wetland indicator values.

Description

General: Lily Family (Liliaceae). This perennial herbaceous plant has straw-colored or golden-yellow flowers with a conspicuous black-purple vein on the outside running from the apex to the base of each petal. The flowers are arranged in umbels and each umbel contains 16 to 40 flowers. The stamens are yellow, alternately long and short. The scape is 2-4 dm long. The leaves are few in number and grasslike. The fruit capsules contain black seeds, which are ridged longitudinally.

Distribution

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. It is found in coastal coniferous and mixed forests from 0-3000 m. The plant is found in the Sierra Nevada, central western California, Cascade Range foothills, Klamath Ranges, and up to southwestern Oregon.

Establishment

If possible, obtain the seed and corms from local sources near where they will be planted, to maintain genetic diversity of golden brodiaea and for the best adaptation to local conditions. Some plant nurseries may label their corms and seeds according to geographic source. If planting flowering-size corms, they can be directly planted outside. Plant the corms in the fall in full sun. The less crowded the more the corms will offset. Plant them 2 to 4 inches apart and 4 inches deep. A well-drained soil that is light and loose will produce bigger corms. Water and weed the patch regularly and protect it from small and large mammals, insects, and birds. Keep the ground slightly damp. If given too much water the corms will rot. If it rains fairly regularly, don't water the area. When the leaves on the plants have turned yellow and dried up, stop watering. Allow the corms to summer bake. The plants should be well established after one year.

If planting seeds of golden brodiaea, store the seeds in a paper bag until autumn. Plant the seeds before October 1st in a container and care for them for two years before planting them outside in the ground. Plant the seeds in six-inch pots because the corms will pull themselves down to the depth they require. Plant about 100 seeds per pot. Place them on top of the soil and sprinkle a little soil over them and put one-quarter inch gravel on top. Set the pots in partial shade so they won't dry out so fast. They can be outside or in a hot house. The seed does not need to be stratified. Start watering the pots right away and keep them slightly damp. Fertilize the pots in late winter and early spring and protect the plants from birds and other animals. If the pots are outside, let the rains naturally water the pots and in a drought year, supplement with hand watering. Stop watering as soon as the foliage of the plants turns yellow. Resume watering the next fall, if rains are insufficient. After the second year, separate the plants and transplant them two inches apart in the fall when the corms are dormant and water them. Grow them for one more year or two more years to bloom,

repeating this cycle and then plant them outside in the ground in the autumn.

Management

The area of golden brodiaea will require regular weeding and the use of a weak solution of fertilizer twice only during the active growth in the spring. The corms can be kept from overcrowding by thinning them every three years. This involves picking off the cormlets and replanting them elsewhere in the garden.

There are five major types of indigenous management activities conducted in California that were designed to ensure future corm production at traditional gathering sites: 1) conscious breaking off cormlets from the harvested parent corms and replanting them; 2) sparing whole plants; 3) harvesting the corms after plants have gone to seed and dumping the seeds on the ground; 4) burning areas; and 5) irrigation. Periodic digging and thinning of the corms, and popping off the cormlets and replanting them may enhance grass nut numbers and densities. Digging corms may in fact be a form of tillage, which will increase the size of the gathering tract, aerate the soil, lower weed competition, and prepare the seedbed to increase seed germination rates. If grass nut populations require periodic disturbance to maintain and increase their populations, then indigenous harvesting regimes if reenacted, may help maintain populations. At the very least--populations that become overcrowded and show reduced vigor should be divided and separated.

Cultivars, Improved and Selected Materials (and area of origin)

Please check the Vendor Database, expected to be on-line through the PLANTS Web site in 2001 by clicking on Plant Materials. This species is not readily available from commercial nurseries.

References

- Anderson, M.K. & D.L. Rowney 1998. *California geophytes: their ecology, ethnobotany, and conservation*. Fremontia 26(1):12-18.
- Barrett, S.A. & E.W. Gifford 1933. *Miwok material culture*. Bulletin of the Public Museum of the City of Milwaukee 2(4):117-376.
- Keator, G. 1993. *Triteleia*. pp. 1206-1208 IN: The Jepson Manual: Higher Plants of California. J.C. Hickman (ed.). University of California Press, Berkeley, California.

Latta, F.F. 1977. *Handbook of the Yokuts Indians*. Kern County Museum.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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